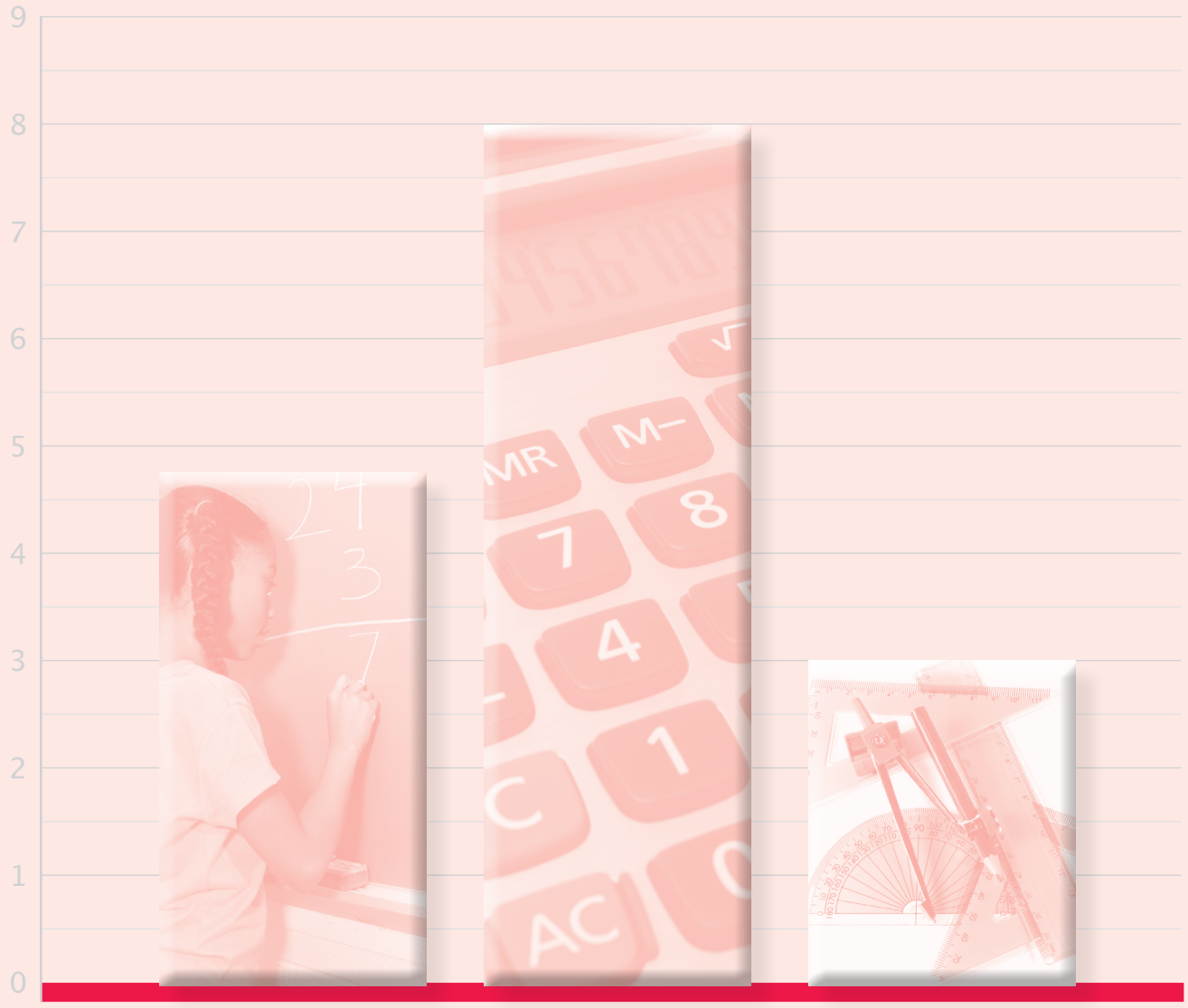
3rd
4th
5th
6th
7th
8th

Grade 3

meap™
Michigan Educational Assessment Program

Item Descriptors



MATHEMATICS

FALL 2013

MICHIGAN STATE BOARD OF EDUCATION
STATEMENT OF ASSURANCE OF COMPLIANCE WITH FEDERAL LAW

The Michigan State Board of Education complies with all Federal laws and regulations prohibiting discrimination and with all requirements and regulations of the U.S. Department of Education. It is the policy of the Michigan State Board of Education that no person on the basis of race, color, religion, national origin or ancestry, age, sex, marital status, or handicap shall be discriminated against, excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination in any program or activity for which it is responsible or for which it receives financial assistance from the U.S. Department of Education.

NOTE: For each item listed throughout this booklet, the first statement is a summary of the Michigan Grade Level Content Expectation (GLCE) and the second statement is the descriptor for the item's stem or question.

Portions of this work were previously published.

Printed in the United States of America.

Students were instructed to read the directions below silently as the test administrator read them aloud.

PART 1

DIRECTIONS

This test has two parts. You may **NOT** use a calculator on any part of this test. You may use open space in this test booklet for scratch paper.

The items on this test are all multiple-choice. Multiple-choice items require you to choose the best answer from among three answer choices. Mark your answer in your test booklet by completely filling in the bubble next to the correct answer. Use only a No. 2 pencil to mark your answer in your test booklet. If you erase an answer, be sure to erase it completely.

Be careful not to make any marks in the bubbles next to the letters A, B, or C except for the one that goes with your answer. You may **NOT** use any other paper to do your work.

Sample Multiple-Choice Item:

Julia had $5.00. She spent $2.54. How much money did she have left?

○ **A** $7.54

○ **B** $3.54

● **C** $2.46

For this sample item, the correct answer is **C**. Circle **C** is filled in.

Once you have reached the word **STOP** in your test booklet, do **NOT** go on to the next page.

If you finish early, you may check your work in Part 1 of the test **ONLY**.

Do **NOT** look at items in Part 2 of the test.

NOTE: The directions for Part 2 are the same as the above instructions.

1 **N.ME.02.01:** Count to 1000 by 1's, 10's, and 100's starting from any number in the sequence.

Skip count by 10s twice.

A correct

B skip counted by ten, then skip counted by one

C skip counted by one twice

2 **N.ME.02.02:** Read and write numbers to 1000 in numerals and words, and relate them to the quantities they represent.

Select block model that matches given word form of number.

A correct

B transposed 10s blocks with 100s blocks

C included extra 100s blocks equal to the number of tens blocks

3 **N.FL.02.06:** Decompose 100 into addition pairs, e.g., 99 + 1, 98 + 2.

Select addition pair that has value of 100.

A correct

B product of two addends equal 100

C addition pair gives sum of 110

4 **N.ME.02.02:** Read and write numbers to 1000 in numerals and words, and relate them to the quantities they represent.

Select block model that matches given word form of number.

A correct

B transposed 2 of 100s blocks with 10s blocks

C transposed 4 of 1s blocks with 10s blocks

5 **N.ME.02.03:** Compare and order numbers to 1000; use the symbols > and <.

Compare two 3-digit numbers.

A incorrect inequality

B correct

C incorrect inequality

6 **G.GS.02.02:** Explore and predict the results of putting together and taking apart two-dimensional and three-dimensional shapes.

Identify result of putting together two 3-D shapes.

A 2-D shape

B correct

C 2-D shape

7 **G.GS.02.04:** Distinguish between curves and straight lines and between curved surfaces and flat surfaces.

Select 3-D shape with given characteristic.

A correct

B incorrect 3-D shape

C incorrect 3-D shape

8 **N.ME.02.03:** Compare and order numbers to 1000; use the symbols > and <.

Identify number in between two given numbers.

A correct

B number with value less than both numbers

C number with value greater than both numbers

9 **N.ME.02.22:** Recognize that fractions such as 2/2, and 3/3 and 4/4 are equal to the whole (one).

Identify fraction that is equal to one whole.

A one in the numerator

B one in the denominator

C correct

10 **N.ME.02.03:** Compare and order numbers to 1000; use the symbols > and <.

Order set of 3-digit numbers from least to greatest.

A correct

B mixed order

C greatest to least

11 G.GS.02.04: Distinguish between curves and straight lines and between curved surfaces and flat surfaces.

Identify shape with straight side.

A no straight sides

B correct

C no straight sides

12 G.GS.02.02: Explore and predict the results of putting together and taking apart two-dimensional and three-dimensional shapes.

Identify two congruent shapes.

A two shapes that are not congruent

B two shapes that are not congruent

C correct

13 N.MR.02.07: Find the distance between numbers on the number line, e.g., How far is 79 from 26?

Determine distance on a number line.

A incorrect difference

B one of given numbers

C correct

14 G.GS.02.04: Distinguish between curves and straight lines and between curved surfaces and flat surfaces.

Identify 3-D shape given attributes.

A incorrect 3-D shape

B incorrect 3-D shape

C correct

15 G.SR.02.05: Classify familiar plane and solid objects, e.g., square, rectangle, rhombus, cube, pyramid, prism, cone, cylinder, and sphere, by common attributes such as shape, size, color, roundness, or number of corners and explain which attributes are being used for classification.

Identify 2-D shape that is not given shape name.

A correct

B given shape

C given shape

16 N.MR.02.07: Find the distance between numbers on the number line, e.g., How far is 79 from 26?

Given two points on a number line, find distance in units.

A correct

B over by 2

C subtracted smaller values from larger values

17 M.PS.02.02: Compare lengths; add and subtract lengths (no conversion of units).

Subtract lengths in inches.

A subtrahend

B correct

C added instead of subtracted

18 M.PS.02.02: Compare lengths; add and subtract lengths (no conversion of units).

Add lengths in inches.

A subtracted

B added incorrectly

C correct

19 M.PS.02.10: Solve simple word problems involving length and money.

Add lengths in miles.

A added two of three addends

B added incorrectly

C correct

20 G.GS.02.02: Explore and predict the results of putting together and taking apart two-dimensional and three-dimensional shapes.

Identify shape resulting from putting together two 2-D shapes.

A result of putting together 4 of given shapes

B incorrect shape

C correct

21 M.UN.02.05: Using both A.M. and P.M., tell and write time from the clock face in 5-minute intervals, and from digital clocks to the minute; include reading time: 9:15 as nine-fifteen and 9:50 as nine-fifty. Interpret time both as minutes after the hour and minutes before the next hour, e.g., 8:50 as eight-fifty and ten to nine. Show times by drawing hands on clock face.

Tell time on an analog clock.

A minute hand for hours and hour hand for minutes

B correct hours, but 5 minutes = 1 minute for minutes

C correct

22 G.GS.02.01: Identify, describe, and compare familiar two-dimensional and three-dimensional shapes, such as triangles, rectangles, squares, circles, semi-circles, spheres, and rectangular prisms.

Identify attribute of a polygon.

A incorrect attribute

B correct

C incorrect attribute

23 N.FL.02.06: Decompose 100 into addition pairs, e.g., 99 + 1, 98 + 2.

Select addition pair that has value of 100.

A addition pair gives sum of 110

B addition pair gives sum of 90

C correct

24 N.MR.02.07: Find the distance between numbers on the number line, e.g., How far is 79 from 26?

Subtract on number line.

A correct

B incorrect difference

C subtracted smaller values from larger values

25 N.FL.02.06: Decompose 100 into addition pairs, e.g., 99 + 1, 98 + 2.

x + ___ = y

A under by 10

B correct

C over by 10

26 N.FL.02.10: Add fluently two numbers through 99, using strategies including formal algorithms; subtract fluently two numbers through 99.

Add two 2-digit numbers.

A subtracted

B under by 10

C correct

27 N.FL.02.10: Add fluently two numbers through 99, using strategies including formal algorithms; subtract fluently two numbers through 99.

Subtract two 2-digit numbers.

A correct

B subtracted smaller values from larger values

C added

28 G.GS.02.04: Distinguish between curves and straight lines and between curved surfaces and flat surfaces.

Identify 3-D shape that has only flat surfaces.

A incorrect 3-D shape

B incorrect 3-D shape

C correct

29 N.MR.02.16: Given a simple situation involving groups of equal size or of sharing equally, represent with objects, words, and symbols; solve.

Identify graphic that represents equal sharing.

A equal sharing, but incorrect number of students

B correct

C correct number of students, unequal sharing

30 M.PS.02.02: Compare lengths; add and subtract lengths (no conversion of units).

Subtract lengths in context.

A correct

B subtracted in tens place but added in ones place

C added instead of subtracted

31 N.FL.02.06: Decompose 100 into addition pairs, e.g., 99 + 1, 98 + 2.

Identify addition pair that is equal to 100.

A correct

B addition pair gives sum of 101

C addition pair gives sum of 99

32 N.MR.02.07: Find the distance between numbers on the number line, e.g., How far is 79 from 26?

Find the distance between two points on a number line.

A added

B correct

C distance between first point and zero

33 N.MR.02.09: Given a contextual situation that involves addition and subtraction using numbers through 99: model using objects or pictures; explain in words; record using numbers and symbols; solve.

Add in context.

A subtracted

B under by 10

C correct

34 N.FL.02.10: Add fluently two numbers through 99, using strategies including formal algorithms; subtract fluently two numbers through 99.

Add two 2-digit numbers.

A 10 under

B correct

C added 10s as 100s

35 N.FL.02.06: Decompose 100 into addition pairs, e.g., 99 + 1, 98 + 2.

Identify number pair with sum of 100.

A correct

B 11 under

C over by 10

36 N.MR.02.08: Find missing values in open sentences, e.g., 42 + box = 57; use relationship between addition and subtraction.

Find missing addend in a number sentence.

A correct

B subtracted smaller values from larger values

C total + given addend

37 N.ME.02.03: Compare and order numbers to 1000; use the symbols > and <.

Identify number for inequality expression.

A less than given number

B equal to given number

C correct

38 G.GS.02.04: Distinguish between curves and straight lines and between curved surfaces and flat surfaces.

Identify shape made out of curves.

A incorrect shape

B incorrect shape

C correct

39 N.ME.02.01: Count to 1000 by 1's, 10's, and 100's starting from any number in the sequence.

Skip count by 100.

A skip counted by ten

B correct

C subtract 10 from subsequent number

40 N.ME.02.03: Compare and order numbers to 1000; use the symbols > and <.

Identify correct inequality with two 3-digit numbers.

A incorrect in tens place

B correct

C incorrect in tens place

41 N.MR.02.16: Given a simple situation involving groups of equal size or of sharing equally, represent with objects, words, and symbols; solve.

Divide in context.

A correct

B subtracted

C added

42 N.ME.02.02: Read and write numbers to 1000 in numerals and words, and relate them to the quantities they represent.

Translate word form of number into numeral.

A a0c = ac

B correct

C a0c = a,00c

43 G.SR.02.05: Classify familiar plane and solid objects, e.g., square, rectangle, rhombus, cube, pyramid, prism, cone, cylinder, and sphere, by common attributes such as shape, size, color, roundness, or number of corners and explain which attributes are being used for classification.

Determine number of vertices given diagram of 3-D shape.

A half of correct total

B correct

C number of edges

44 N.MR.02.08: Find missing values in open sentences, e.g., 42 + box = 57; use relationship between addition and subtraction.

x - ___ = y

A under by 10

B correct

C over by 10

45 G.GS.02.02: Explore and predict the results of putting together and taking apart two-dimensional and three-dimensional shapes.

Identify 3-D shape resulting from putting together 2-D shapes.

A incorrect 3-D shape

B incorrect 3-D shape

C correct

46 N.MR.02.08: Find missing values in open sentences, e.g., 42 + box = 57; use relationship between addition and subtraction.

Calculate subtrahend in number sentence.

A over by 11

B subtracted smaller values from larger values

C correct

47 N.MR.02.08: Find missing values in open sentences, e.g., 42 + box = 57; use relationship between addition and subtraction.

Find missing addend in number sentence.

A under by 10

B correct

C over by 10

48 N.MR.02.09: Given a contextual situation that involves addition and subtraction using numbers through 99: model using objects or pictures; explain in words; record using numbers and symbols; solve.

Add two 2-digit numbers in context.

A subtracted

B under by 10

C correct

49 N.MR.02.09: Given a contextual situation that involves addition and subtraction using numbers through 99: model using objects or pictures; explain in words; record using numbers and symbols; solve.

Subtract in context.

A correct

B subtracted smaller values from larger values

C over by 10

50 N.MR.02.09: Given a contextual situation that involves addition and subtraction using numbers through 99: model using objects or pictures; explain in words; record using numbers and symbols; solve.

Subtract two 2-digit numbers in context.

A correct

B subtracted in tens place but added in ones place

C added

51 N.MR.02.14: Represent multiplication using area and array models.

Match computation to array.

A incorrect array

B incorrect array

C correct

52 G.GS.02.01: Identify, describe, and compare familiar two-dimensional and three-dimensional shapes, such as triangles, rectangles, squares, circles, semi-circles, spheres, and rectangular prisms.

Compare number of sides of two polygons.

A correct

B one more side than difference

C two more sides than difference, also number of sides of one polygon

53 M.PS.02.10: Solve simple word problems involving length and money.

Subtract in context.

A correct

B subtracted smaller values from larger values

C over by 10

3rd

4th

5th

6th

7th

8th

MICHIGAN Department of Education

Office of Standards and Assessment (OSA)
Phone: 1-877-560-8378
Website: www.michigan.gov/baa
Email: baa@michigan.gov